

WHAT IS CLAIMED IS:

1. A battery housing device, comprising:

a battery cartridge which houses a first battery and a second battery connected in series to each other with a terminal of a polarity at an end of the first battery being pressed against and in direct contact with a terminal of an opposite polarity at an end of the second battery;

a battery cartridge housing into which the battery cartridge is inserted;

a fulcrum which is arranged on an inner surface of the battery cartridge and configured to come into contact with a periphery of the first battery; and

an elastic body which is arranged on an inner surface of the battery cartridge housing, wherein when the battery cartridge is gotten inserted into and extracted from the battery cartridge housing, the elastic body presses the periphery of the first battery continuously from an area distant from the fulcrum to another area distant from the fulcrum across an area near the fulcrum to make the first battery wobble about the fulcrum, thereby making the terminal of the first battery rub against the terminal of the second battery.

2. A battery housing device, comprising:

a battery cartridge which houses first, second, third and fourth batteries, the first battery and the second battery being connected in series to each other with a terminal of a polarity at an end of the first battery being pressed against and in direct contact with a terminal of an opposite polarity at an end of the second battery, the third battery and the fourth battery being connected in series to each other with a terminal of a polarity at an end of the third battery being pressed against and in direct contact with a terminal of an opposite polarity at an end of the fourth battery, the first battery and the third battery being disposed parallel to each other, the second battery and the fourth battery being disposed parallel to each other;

a battery cartridge housing into which the battery cartridge is inserted;

a first fulcrum which is arranged on an inner surface of the battery cartridge and configured to come into contact with a periphery of the first battery;

a second fulcrum which is arranged on the inner surface of the battery cartridge and configured to come into contact with a periphery of the third battery; and

first and second elastic bodies which are arranged on an inner surface of the battery

cartridge housing,

wherein when the battery cartridge is gotten inserted into and extracted from the battery cartridge housing, the first elastic body presses the periphery of the first battery continuously from an area distant from the first fulcrum to another area distant from the first fulcrum across an area near the first fulcrum to make the first battery wobble about the first fulcrum, thereby making the terminal of the first battery rub against the terminal of the second battery, and the second elastic body presses the periphery of the third battery continuously from an area distant from the second fulcrum to another area distant from the second fulcrum across an area near the second fulcrum to make the third battery wobble about the second fulcrum, thereby making the terminal of the third battery rub against the terminal of the fourth battery.

3. The battery housing device as defined in claim 2, wherein:

the first and second fulcrums are substantially aligned with each other in an insertion direction of the battery cartridge; and

the first and second elastic bodies are located at positions spaced apart from each other in the insertion direction of the battery cartridge by a distance substantially equal to a half of a length of the first and third batteries.